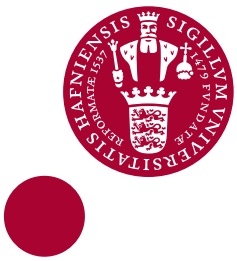

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THE EFFECTS OF INULIN IN COMBINATION WITH ALBENDAZOLE ON CURE AND EGG REDUCTION RATES OF *TRICHURIS TRICHIURA* INFECTIONS IN SCHOOLCHILDREN IN UGANDA

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Infections with *Trichuris trichiura* are estimated to affect approximately 1 billion people globally with high prevalences and intensities in pre-school and school-age children. Albendazole is one of the recommended drugs for controlling this infection, but unfortunately cure and egg reduction rates are low. Inulin is a naturally occurring, easily fermentable storage carbohydrate found in many vegetables and is widely used as a food ingredient. Inulin has been shown to stimulate growth and activity of potentially health-enhancing intestinal bacteria in the large intestine. Incorporation of inulin in the feed of pigs has decreased the worm burdens and faecal egg excretion of *T. suis*, the pig equivalent to the human *T. trichiura*, residing in the caecum and colon. In order to achieve higher cure and egg reduction rates in control of *T. trichiura* infections in humans, albendazole treatment was combined with prior intake of inulin in 35 schoolchildren and compared with 35 children only receiving albendazole. *T. trichiura* infected schoolchildren received inulin (15 g/d) or placebo for seven days and on the last day the children were treated with one dose albendazole (400 mg oral). Faecal egg counts were monitored at baseline, on the day of albendazole treatment and one and two weeks post-treatment. For the groups combined, cure rates were only 7.6% one week post-treatment, while there was no cure at all two weeks after treatment. For the inulin and placebo groups, geometric mean egg counts decreased significantly ($P< 0.00005$) from the day of albendazole treatment (601 and 622 epg) to one week (62 and 73 epg), but increased ($P< 0.00005$) again in the second week (291 and 396 epg). Inulin given in the selected dose and in the selected duration did not add to the effect of albendazole. Furthermore, cure rates for albendazole were even lower than expected.